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ABSTRACT

The second in a series of African-American bibliographies, this bibliography was issued in honor of both Black History Month and Inventors Day in February 1991. It focuses on the contributions of black Americans in the areas of science, technology, medicine, and allied fields such as dentistry and nursing. The materials cited emphasize the accomplishments of individuals from all parts of the United States, in all periods, and from all backgrounds. The bibliography lists items in the collections of the New York State Library and includes books, selected periodical articles, patents, and other materials. New York State Library call numbers are given for the books and periodicals to facilitate both library retrieval and interlibrary loan. Patent documents are filed numerically and are part of the patent depository collection of the New York State Library. It is noted that no more than three patents are given for each inventor for reasons of space. (MAB)

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An African-American Bibliography: Science, Medicine, and Allied Fields

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AN AFRICAN-AMERICAN BIBLIOGRAPHY: SCIENCE, MEDICINE, AND ALLIED FIELDS

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ACKNOWLEDGEMENTS

The list of patents must be considered a selective sampling only, assembled from numerous sources. It gives some indication of the creative scope and variety of African-American inventions. There are many stories behind the names, some of which are documented elsewhere in this bibliography. Two sources which were particularly useful for clues to possible patent holders in recent years were Vivian Ovelton Sammons' *Blacks in Science and Medicine* and James K. K. Ho's *Black Engineers in the United States*, both of which appear in the book list. Patricia Carter Ives, a patent examiner at the U.S. Patent and Trademark Office, wrote the book, *Creativity and Inventions; The Genius of Afro-Americans and Women in the United States and Their Patents*, in 1987; this and her 1980 article (see this bibliography) list many African-American patentees, a number of whose names do not appear elsewhere. A special effort was made to include the black women inventors she and others named. Starting with the information in these records, the compiler checked selected names in several patent databases, and utilized subject matter, dates, assignees, and place of residence of the inventors to arrive at a final list. Where possible, names were also cross-checked in *American Men and Women of Science*, 17th ed. (RT, 509, qAc, 83-55398).

This bibliography was compiled by Theresa C. Strasser, a reference librarian at the New York State Library. The first publication in the series, *An African-American Bibliography: The Arts*, compiled by Billie Aul and Melinda Yates, was issued in January 1990. Other titles in the series are forthcoming.

FOREWARD

This is the second part of the New York State Library's series, *An African-American Bibliography*. It is issued in honor of both Black History Month and Inventors Day, February 1991.

The mission of the New York State Library is to provide reference, information, and materials to support the work of New York State government and to ensure that every resident of the State has convenient access to essential library services. To carry out this mission, the Library serves as the principal library resource for State government and is a coordinating and resource center for the statewide interlibrary loan network. If you cannot obtain the works listed in this bibliography at your local library, you may request them through interlibrary loan. The bibliography contains items in the collections of the New York State Library and includes books, selected periodical articles, patents, and other materials. New York State Library call numbers are given for books and periodicals to facilitate both library retrieval and interlibrary loan. Patent documents are filed numerically and are part of the patent depository collection of the New York State Library.

The contributions of black Americans in the areas of science, technology, medicine, and allied fields such as dentistry and nursing have gone largely unremarked, with a few famous exceptions. The material in this bibliography emphasizes the accomplishments of individuals from all parts of the country, in all periods, from all backgrounds. It is hoped that it will provide one starting point for future research.

Most of what we know about African-American inventors with patents prior to 1910 is the result of the definitive, contemporary work of Henry Edward Baker, a young African-American graduate of Harvard Law School whose position of Assistant Examiner at the U.S. Patent Office facilitated his scholarly explorations. From the replies of thousands of registered patent attorneys to correspondence, Baker collected nearly 800 instances of verified patents issued to blacks, which he claimed represented less than half of those actually in existence. A portion of Baker's work was published in two essays and one journal article, listed in this bibliography. Baker's list consisted, for the most part, of last names and first initials, although patent documents give full names, which are included here.

Sources for later twentieth-century African-American patentees are fragmentary and far from comprehensive. There are no reliable statistics. The published U.S. Patent and Trademark Office records typically do not identify patentees by race, one noteworthy exception being Henry Blair and his two inventions (1834 and 1836).

Note: listed names may appear in patent documents as sole or coinventors. For reasons of space, no more than three patents are given for each inventor. Patent titles as given in annual indexes, databases, or the *Official Gazette* of the U.S. Patent and Trademark Office may vary slightly from each other and from the titles on the patent documents themselves.

BOOKS

Allen, Sallie T. *The Directory of Black Nursing Faculty; Baccalaureate and Higher Degree Programs.* Lisle, IL: Tucker Publications, Inc., 1988. (R, 610.7302573, qA429, 89-2808).

American Nurses' Association. *Minority Groups in Nursing: A Bibliography.* Kansas City, MO: The Association, 1976. (C, 016.3621, A512, 76-8196, 1976).

Baker, Henry Edwin. *The Colored Inventor.* Reprint of the 1913 edition. New York: Arno Press, 1969. (C, 608.717496, B167, 78-21142).

> Originally published on the 50th anniversary of the Emancipation Proclamation.

Baker, Henry Edwin. "The Negro as an Inventor." In: *Twentieth Century Negro Literature, or, A Cyclopedia of Thought on the Vital Topics Relating to the American Negro,* edited by D. W. Culp. Naperville, IL: J. L. Nichols & Co., 1902. (C, 325.26, C96).

> Contains a list of several hundred patents issued to African-Americans through the year 1900, a commentary on some of the inventors, a summary of background research, and a brief biography of the author.

Banneker, Benjamin. *Works of Benjamin Banneker.* New York: 3M International Microfilm Press, 1970. (MA/FM, 528.1, B219).

> Microfilmed from the Schomburg Collections of the New York Public Library. Contents: *Benjamin Banneker's Pennsylvania, Delaware, Maryland and Virginia Almanack and Ephemeris for the Year of Our Lord, 1792*; *Banneker's Almanack and Ephemeris for the Year of Our Lord, 1793*; *Virginia Almanack, for the Year of Our Lord, 1794*; John H. Latrobe, *Memoir of Benjamin Banneker, read before the Maryland Historical Society*; Martha Tyson Ellicot, *Sketch of the Life of Benjamin Banneker, from Notes Taken in 1836*; Benjamin J. Lossing, "Benjamin Banneker," In: *Eminent Americans: Comprising Brief Biographies of Three Hundred and Thirty Distinguished Persons.*

Boykin, A. Wade, Anderson J. Franklin and J. Frank Yates, eds. *Research Directions of Black Psychologists.* New York: Russell Sage Foundation, 1979. (C, 155.8496073, R432, 80-32856).

Brown, Letitia Woods and Elsie M. Lewis. *Washington from Banneker to Douglas.* Washington, D.C.: Education Department, National Portrait Gallery, 1971. (C, 310.4519607, qB878, 77-7458).

> Prepared to accompany an exhibit at the National Portrait Gallery, Nov. 1, 1971 to Jan. 28, 1972.

Burt, McKinley, Jr. *Black Inventors of America.* Portland, OR: National Book Company, 1989. (C, 926.6048 qB973, 90-13120).

Campbell, Marie. *Folks Do Get Born.* New York: Rinehart & Company, 1946. (Z, 618.2, C189).

> Midwives in Georgia.

Carnegie, Mary Elizabeth. *The Path We Tread; Blacks in Nursing, 1854-1984.* Philadelphia: Lippincott, 1986. (C, 331.4816107, C289, 87-053723).

Carver, George Washington. *George Washington Carver in His Own Words.* Edited by Gary R. Kremer. Columbia: University of Missouri Press, 1987. (C, 630.924, C331, 87-33768).

Cobb, William Montague. *The First Negro Medical Society; A History of the Medico-Chirurigical Society of the District of Columbia, 1884-1939.* Washington, DC: The Associated Publishers, 1939. (Z, 610.6, M486).

Conner, Douglas L. *A Black Physician's Story: Bringing Hope in Mississippi*. Jackson, MS: University Press of Mississippi, 1985. (C, 610.924, C752, 88-028184).

Dummett, Clifton Orrin, ed. *The Growth and Development of the Negro in Dentistry in the United States*. Chicago: National Dental Association, 1952. (Z, 617.6, D889).

Graham, Shirley. *Your Most Humble Servant*. New York: Julian Messner Inc., 1949. (Z, 520.92, B219g).

Biography of Benjamin Banneker.

Greene, Harry Washington. *Holders of Doctorates Among American Negroes: An Educational and Social Study of Negroes Who Have Earned Doctoral Degrees in Course, 1876-1943*. Boston: Meador Publishing Company, 1946. (C, 325.26, G7992).

Guzman, Jessie Parkhurst. *George Washington Carver, A Classified Bibliography*. Records and Research Pamphlet No. 3. Tuskegee, AL: Department of Records and Research, Tuskegee Institute, 1954. (C, 012, C331, 74-7625).

Haber, Louis. *Black Pioneers of Science and Invention*. New York: Harcourt, Brace & World, 1970. (Z, 509.2, Ah12).

Hardwick, Richard. *Charles Richard Drew, Pioneer in Blood Research*. New York: Scribner, 1967. (Z, 610.92, D776h2).

Harris, M. A. *Granville T. Woods Memorial*. Collector's ed. Brooklyn: M.A. Harris, 1974. (C, 620.0092, qW894, 75-6844).

Hayden, Robert C. and Jacqueline Harris. *Nine Black American Doctors*. Reading, MA: Addison-Wesley, 1976. (C, 920,H415, 78-24643).

Henderson, Algo Donmeyer and Natalie B. Gumas. *Admitting Black Students to Medical and Dental Schools*. Berkeley, CA: Center for Research and Development in Higher Education, University of California, 1971. (C, 378.1057, qH496).

Hine, Darlene Clark, ed. *Black Women in the Nursing Profession: A Documentary History*. New York: Garland Publishing Inc., 1985. (C, 610.7308996, qB627, 86-36450).

Ho, James K. K., ed. *Black Engineers in the United States; A Directory*. Washington, DC: Howard University Press, 1974. (C, 620.002573, H678, 77-29269).

Holt, Rackham. *George Washington Carver; An American Biography*. Garden City, NY: Doubleday, Doran, 1943. (Z, 630.92, C33h).

"Inventors and Scientists," In: *The Negro Almanac: A Reference Work on the Afro-American*, edited by Harry A. Ploski and James Williams. 4th ed. New York: John Wiley & Sons, 1983, pp. 1053-1076. (R, 973, qP729a, 1983).

Ives, Patricia Carter. *Creativity and Inventions: The Genius of Afro-Americans and Women in the United States and Their Patents*. Arlington, VA: Research Unlimited, 1987. (C, 609.22, I95, 90-14537).

James, Portia. *The Real McCoy: African-American Invention and Innovation, 1619-1930*. Washington, DC: Smithsonian Institution, 1989. (C, 609.22, J28, 90-13178).

Jenkins, Edward S., ed. *American Black Scientists and Inventors*. Washington, DC: National Science Teachers Association, 1975. Available as ERIC document. (ED 176-983).

Kenney, John A. *The Negro in Medicine*. Tuskegee, AL: Tuskegee Institute Press, 1912. (Z, 610.92, Ak).

Kidd, Foster, ed. *Profile of the Negro in American Dentistry*. Prepared under the supervision of the Society for Research and Study of the Negro in Dentistry, Inc. Washington, DC: Howard University Press, 1979. (C, 301.4446, P964, 80-32841).

Latimer, Lewis H. *Incandescent Electric Lighting: A Practical Description of the Edison System*. NY: Van Nostrand, 1890. (N, 621.326, L35).

Manber, David. *Wizard of Tuskegee; The Life of George Washington Carver*. New York: Crowell-Collier Press, 1967. (Z, 630.92, C33m2).

Manning, Kenneth R. *Black Apollo of Science: The Life of Ernest Everett Just*. New York: Oxford University Press, 1983. (C, 574.0924, M283, 84-29211).

Maynard, Aubre de L. *Surgeons to the Poor: The Harlem Hospital Story*. New York: Appleton-Century-Crofts, 1978. (C, 362.1109747, M471, 78-34304).

McMurry, Linda O. *George Washington Carver, Scientist and Symbol*. New York: Oxford University Press, 1981. (C, 630.924, M168, 82-22310).

Merritt, Raleigh Howard. *From Captivity to Fame; or, The Life of George Washington Carver*. Boston: Meador Publishing Co., 1928. (Z, 630.92, C33m5).

Miller, Basil William. *George Washington Carver, God's Ebony Scientist*. 2d ed. Grand Rapids, MI: Zondervan Publishing House, 1943. (Z, 630.92, C33m).

Morais, Herbert Montfort. *History of the Negro in Medicine*. International Library of Negro Life

and History, vol. 4. New York: Publishers Company, Inc., 1968. (C, 917.3097496, qI615).

Norris, John Saurin. *Sketch of the Life of Benjamin Banneker; from notes taken in 1836*. Baltimore: Maryland Historical Society, 1854. (Z, 610.92, B21n).

Paper read by Mr. Norris to the Society, actually compiled by Martha Tyson Ellicot, who knew Banneker personally and was in possession of the Banneker papers.

Organ, Claude H., Jr. and Margaret M. Kosiba. *A Century of Black Surgeons; the U.S.A. Experience*. Norman, OK: Transcript Press, 1987. (C, 617.0922, c397, 88-033590).

Patterson, Lillie. *Benjamin Banneker, Genius of Early America*. Nashville: Abingdon, 1978. (C, 520.924, B219, 79-20204).

Pearson, Willie, Jr. and H. Kenneth Bechtel, eds. *Blacks, Science and American Education*. New Brunswick, NJ: Rutgers University Press, 1989. (C, 508.996073, B631, 89-45053).

Peyton, Thomas Roy. *Quest for Dignity: An Autobiography of a Negro Doctor*. Los Angeles: Publishers Western, 1963. (Z, 610.92, P519p5).

Pitrone, Jean Maddern. *Trailblazer; Negro Nurse in the American Red Cross*. New York: Harcourt, Brace & World, 1969. (Z, 610.92, D261p6).

The story of Frances Elliot Davis, first black Red Cross nurse.

Poindexter, Hildrus Augustus. *My World of Reality (An Autobiography)*. (C, 610.924, P571, 74-11120).

Story of an African-American physician.

Reitzes, Deitrich C. *Negroes and Medicine*. Cambridge, MA: Harvard University Press, 1958. (Z, 610, R379).

Sammons, Vivian O., comp. *Blacks in Science and Related Disciplines*. LC Science Tracer Bullet TB-85-5. Washington, DC: Library of Congress, Science Reference Section, June 1985. (LC 33.10:85-5).

_____. *Blacks in Science and Medicine*. New York: Hemisphere Publishing Corporation, 1990. (C, 509.2, qB631, 90-6929).

"Scientists." In: *Encyclopedia of Black America*, edited by William A. Low and Virgil A. Clift. New York: McGraw-Hill Book Company, 1981. (R, 973.0496073, qE56, 81-24479).

Stanley, Autumn. "From Africa to America: Black Women Inventors." In: *The Technological Woman: Interfacing with Tomorrow*, edited by Jan Zimmerman. New York: Praeger, 1983. (C, 305.4, T255, 83-29717).

Staupers, Mabel Keaton. *No Time for Prejudice; A Story of the Integration of Negroes in Nursing in the United States*. New York: Macmillan, 1961. (Z, 610.7306273, S798).

Still, James. *Early Recollections and Life of Dr. James Still, 1812-1885*. New Brunswick, NJ: Rutgers University Press, 1973. (C, 616.00924, S857, 74-4164).

Summerville, James. *Educating Black Doctors; A History of Meharry Medical College*. University, AL: University of Alabama Press, 1983. (C, 610.7117685, S955, 84-37541).

Williams, James C., comp. *At Last Recognition in America: A Reference Handbook of Unknown Black Inventors and Their Contributions to America*. Chicago: B.C.A. Publishing Corp., 1978. (C, 608.778, W724, 82-24801, v.1).

Woodson, Carter Godwin. *The Negro Professional Man and the Community, with Special Emphasis on the Physician and the Lawyer*. Washington, DC: Association for the Study of Negro Life and History, Inc., 1934. (C, 325.26, W89nep).

SELECTED PERIODICAL ARTICLES

Alexander, Leslie L. "Early Medical Heroes: Susan Smith McKinney-Steward, M.D., 1847-1918." *Crisis*, vol. 87, no. 1, Jan. 1980, pp. 21-23. (J, 326.8, qC93).

Baker, Henry E. "The Negro in the Field of Invention." *Journal of Negro History*, vol. 2, no. 1, Jan. 1917, pp. 21-36. (J, 325.26, J86).

Beardsley, E. H. "Making Separate, Equal: Black Physicians and the Problems of Medical Segregation in the Pre-World War II South." *Bulletin of the History of Medicine*, vol. 57, no. 3, 1983, pp. 382-396. (J/FM, 610.9, B936).

Christopher, Michael C. "Granville T. Woods; The Plight of a Black Inventor." *Journal of Black Studies*, vol. 11, no. 3, Mar. 1981, pp. 269-276. (J/FM, 310.45196, J862).

Congressional Record. 53d Cong., 2d sess., vol. 26, pt. 8, Aug. 10, 1894, pp. 8382-8384. (J, 328.73, qU49cr).

Contains "A Partial List of Patents Granted by the United States for Inventions by Afro-Americans," appended to the record by Congressman Murray of South Carolina.

Drew, Charles Richard. "Negro Scholars in Scientific Research." *Journal of Negro History*, vol. 35, no. 2, Apr. 1950, pp. 135-149. (J, 325.26, J86).

Address delivered by Dr. Drew before the Annual Meeting of the Association for the Study of Negro Life and History in New York City on October 30, 1949.

Gray, Garry. "H. C. Haynes, Barber and Inventor." *Negro History Bulletin*, vol. 40, no. 5, Sept.-Oct. 1977, pp. 751-752. (J, 325.2670973, qN393).

Ives, Patricia Carter. "Patent and Trademark Innovations of Black Americans and Women." *Journal of the Patent Office Society*, vol. 62, no. 2, Feb. 1980, pp. 108-126. (LAW/PER).

Contains appendices with lists of patents awarded to blacks and women. Names many African-American patentees, especially in the '60s and '70s, not included in this bibliography.

Jenkins, Edward S. "Impact of Social Conditions; A Study of the Works of American Black Scientists and Inventors." *Journal of Black Studies*, vol. 14, no. 4, June 1984, pp. 477-491. (J/FM, 310.45196, J862).

Link, Eugene P. "Civil Rights Activities of Three Great Negro Physicians (1840-1940)." *Journal of Negro History*, vol. 52, no. 3, July 1967, pp. 169-184. (J, 325.26, J86).

Odom, Retha. "Pioneers in Technology." *Black Enterprise*, vol. 11, no. 11, June 1981, pp. 182-188. (J, 338.04, qB627, 79-55791).

Plummer, Betty. "Document: Letters of James Durham to Benjamin Rush." *Journal of Negro History*, vol. 65, no. 3, Summer 1980, pp. 261-269. (J, 325.26, J86).

James Durham, b. 1762, was one of the first black men to practice medicine in America.

Savitt, Todd L. "Lincoln University Medical Department: A Forgotten 19th Century Black Medical School." *Journal of the History of Medicine and Allied Sciences*, vol. 40, no.1, 1985, pp. 42-65. (J/FM, 610.905,J864).

_____. "Entering a White Profession: Black Physicians in the New South, 1880-1920." *Bulletin of the History of Medicine*, vol. 61, no. 4, Winter 1987, pp. 507-540. (J, 610.9, B936).

Scottron, Samuel. "Manufacturing Household Articles." *Colored American Magazine*, vol. 7, no. 10,

Oct. 1904, pp. 620-623. Microfiche reprint of title in series: *The Black Experience in America; Negro Periodicals in the United States, 1840-1960*. New York: Negro Universities Press, 1969. (MB/FF, 051, C719).

Scottron had several patents, some of which are listed in the "U.S. Patents" section of this bibliography.

"Seminar Series Honors Blacks in Science and Technology." *Science*, vol. 216, Apr. 2, 1982, pp. 43-44. (J/FM, 505,S411).

Seraile, William. "Susan McKinney Steward: New York State's First African-American Woman Physician." *Afro-Americans in New York Life and History*, vol. 9, no. 2, July 1985, pp. 27-44. (R, 9974.700496, A258, 82-55238).

Wynes, Charles E. "Dr. James Durham, Black Physician." *Pennsylvania Magazine of History and Biography*, vol. 103, no. 3, July 1979, pp. 325-333. (J, 974.8, P412).

Yancy, Dorothy Cowser. "Four Black Inventors with Patents." *Negro History Bulletin*, vol. 39, no. 4, Apr. 1976, pp. 574-576. (J, 325.2670973, qN393).

Young, Herman A. and Barbara H. Young. "Science and Black Studies." *Journal of Negro Education*, vol. 46. no. 4, 1977, pp. 380-387. (J/FM, 371.974, J86).

Contains "Micro-Roster of Black Scientists and Inventors."

SPECIAL MATERIALS

Akinsheye, Dexter. *African-American Inventors Series*. Silver Spring, MD: Three Dimensional Publishing, 1989.

A collection of 39 study prints which includes patent diagrams, photographs and histories of some African-American inventors.

U.S. PATENTS

Abrams, William B. Hame Attachment [part for a draft horse's collar], U.S. Patent 450,550, Apr. 14, 1891.

Alexander, Winser Edward. System for Enhancing Fine Detail in Thermal Photographs, U.S. Patent 3,541,333, Nov. 17, 1970.

Ammons, Virgie M. Fireplace Damper Actuating Tool, U.S. Patent 3,908,633, Sept. 30, 1975.

Ashbourne, Alexander P. Processes for Preparing Cocoanut for Domestic Use, U.S. Patent 163,962, June 1, 1875; Biscuit Cutters, U.S. Patent 170,460, Nov. 30, 1875; Refining Cocoanut Oil, U.S. Patent 230,518, July 27, 1880.

Baker, David. Railway Signal Apparatus, U.S. Patent 1,054,267, Feb. 25, 1913; Signal Apparatus, U.S. Patent 1,154,162, Sept. 21, 1915.

Battle, James. Variable Resistance Resistor Assembly, U.S. Patent 3,691,503, Sept.12, 1972.

Bayless, Robert Gordon. Many patents in field of microencapsulation, including: Solid Globules Containing Dispersed Materials, U.S. Patent 3,922,373, Nov. 25, 1975; Process of Feeding Larval Marine Animals, U.S. Patent 4,073,946, Feb. 14, 1978; Method of Producing Microcapsules and Resulting Product, U.S. Patent 4,107,071, Aug. 15, 1978.

Beard, Andrew Jackson. Rotary Engine, U.S. Patent 478,271, July 5, 1892; Car Coupling ("Jenny Coupler" which reportedly saved the lives of hundreds of trainmen), U.S. Patent 594,059, Nov. 23, 1897.

Belcher, Paul Eugene. Remote AC Power Control with Control Pulses at the Zero Crossing of the AC Wave, U.S. Patent 4,328,482, May 4, 1982.

Bell, Landrow. Smoke Stack for Locomotives, U.S. Patent 115,153, May 23, 1871; Dough Kneader, U.S. Patent 133,823, Dec. 10, 1872.

Benjamin, Lyde W. Broom Moistener and Bridles, U.S. Patent 497,747, May 16, 1893.

Benjamin, Miriam E. Gong and Signal Chairs for Hotels, etc., U.S. Patent 386,289, July 17, 1888. Adapted for use by the U.S. House of Representatives.

Benton, James W. Lever-derrick, U.S. Patent 658,939, Oct. 2, 1900. According to Henry Baker, Benton walked from Kentucky to Washington carrying his device in order to get his patent.

Bishop, Alfred A. Nuclear Reactor with Self-Orificing Radial Blanket, U.S. Patent 4,077,835, Mar. 7, 1978.

Blackburn, Albert B. Railway Signal, U.S. Patent 376,362, Jan. 10, 1888; Spring Seat for Chairs, U.S. Patent 380,420, Apr. 3, 1888; Cash Carrier; U.S. Patent 391,577, Oct. 23, 1888.

Blair, Henry. Designated "colored man" in Patent Office records. Corn Planter, Oct. 14, 1834; Cotton Planter, Aug. 31, 1836. Patents unnumbered during this period.

Blanton, John W. Hydromechanical Rate Damped Servo System, U.S. Patent 3,101,650, Aug. 27, 1963.

Boone, Sarah. Ironing Board, U.S. Patent 473,653, Apr. 26, 1892.

Bowman, Henry A. Making Flags, U.S. Patent 469,395, Feb. 23, 1892.

Boykin, Otis F. Many patents for electronic devices, including Electrical Resistance Element and Method of Making Same, U.S. Patent 3,1911,108, June 22, 1965; Thin Film Capacitor, U.S. Patent 3,394,290, July 23, 1968; Electrical Resistor and

Method of Making Same, U.S. Patent 4,561,996, Dec. 31, 1985.

Bradberry, Henrietta. Bed Rack, U.S. Patent 2,320,027, May 25, 1943; Torpedo Discharge Means, U.S. Patent 2,390,688, Dec. 11, 1945.

Brooks, Charles B. Punch, U.S. Patent 507,672, Oct. 31, 1893; Street Sweepers, U.S. Patent 556,711, Mar. 17, 1896; Dust-Proof Bag for Street Sweepers, U.S. Patent 560,154, May 12, 1896.

Brooks, Robert Roosevelt. Line Blanking Apparatus for Color Bar Generating Equipment, U.S. Patent 3,334,178, Aug. 1, 1967; Preset Sensitivity and Amplification Control System, U.S. Patent 3,518,371, June 30, 1970; Vertical and Horizontal Aperture Equalization, U.S. Patent 3,546,372, Dec. 8, 1970.

Brown, Marie Van Brittan. Home Security System Utilizing Television Surveillance, U.S. Patent 3,482,037, Dec. 2, 1969.

Burkins, Eugene. Breech-Loading Cannon, U.S. Patent 649,433, May 15, 1900.

Burnham, Gerald Owens. Direction Coded Digital Stroke Generator Providing A Plurality of Symbols, U.S. Patent 3,938,130, Feb. 10, 1976.

Burr, John A. Lawn Mower, U.S. Patent 624,749, May 9, 1899.

Burr, William F. Switching Device for Railways, U.S. Patent 636,197, Oct. 31, 1899.

Butler, Francis Edward. Audible Underwater Signal, U.S. Patent 2,803,807, Aug. 20, 1957; Drill Mine, U.S. Patent 2,912,929, Nov. 17, 1959; Watertight Electrical Connector, U.S. Patent 2,991,441, July 4, 1961.

Butler, Richard A. Train Alarm, U.S. Patent 584,540, June 15, 1897.

Byrd, Turner, Jr. Holder for Reins for Harness, U.S. Patent 123,328, Feb. 6, 1872; Apparatus for Detaching Horses from Carriages, U.S. Patent 124,790, Mar. 19, 1872; Neck Yokes for Wagons, U.S. Patent 126,181, Apr. 30, 1872.

Campbell, William S. Self-Setting Animal Trap, U.S. Patent 246,369, Aug. 30, 1881.

Carruthers, George R. Image Converter for Detecting Electro-Magnetic Radiation Especially in Short Wave Lengths, U.S. Patent 3,478,216, Nov. 11, 1969. Dr. Carruthers designed the ultraviolet camera/spectrograph which was adapted for use on the lunar surface and placed there by the Apollo 16 astronauts.

Carter, William C. Umbrella Stand, U.S. Patent 323,397, Aug. 4, 1885.

Carver, George Washington. Carver refused to patent a vast majority of the hundreds of products he developed while at Tuskegee Institute. Patent Office records show the following: Cosmetic and Producing the Same, U.S. Patent 1,522,176, Jan. 6, 1925; Paint and Stain and Producing the Same, U.S. Patent 1,541,478, June 9, 1925; Producing Paints and Stains, U.S. Patent 1,632,365, June 14, 1927.

Certain, Jerry M. Parcel Carrier for Bicycles, U.S. Patent 639,708, Dec. 26, 1899.

Chappelle, Emmett W. Numerous patents in photobiology, including Light Detection Instrument, U.S. Patent 3,520,660, July 14, 1970; Method of Detecting and Counting Bacteria, U.S. Patent 3,971,703, July 27, 1976; Rapid, Quantitative Determination of Bacteria in Water, U.S. Patent 4,385,113, May 24, 1983.

Cherry, Matthew A. Velocipede, U.S. Patent 382,351, May 8, 1888; Street Car Fender, U.S. Patent 531,908, Jan. 1, 1895.

Christian, John B. Many patents in chemical engineering, including Grease Composition for Use at High Temperatures and High Speeds, U.S. Patent 3,518,189, June 30, 1970; Fluorine-Containing Benzimidazoles, U.S. Patent 4,267,348, May 12, 1981; Perfluoroalkylether Substituted Phenyl Phosphines, U.S. Patent 4,454,349, June 12, 1984.

Church, Titus S. Carpet Beating Machine, U.S. Patent 302,237, July 22, 1884.

Cook, George. Automatic Fishing Device, U.S. Patent 625,829, May 30, 1899.

Cooper, James. Elevator Device, U.S. Patent 536,605, Apr. 2, 1895; Elevator Safety Device, U.S. Patent 590,257, Sept. 21, 1897.

Cooper, John Richard. Chemical patents include Two-Stage Phosgenation Process for Preparing Aromatic Isocyanates, U.S. Patent 3,234,253, Feb. 8, 1966; Process for Isolating a Fluorine-Containing Polymer, U.S. Patent 3,536,683, Oct. 27, 1970; Separation of Distillable Isocyanates from their Phosgenation Masses, U.S. Patent 3,694,323, Sept. 26, 1972.

Cooper, Jonas. Shutter and Fastening Therefor, U.S. Patent 276,563, May 1, 1883.

Cotton, Donald J. Vertical Liquid Electrode Employed in Electrolytic Cells, U.S. Patent 4,040,932, Aug. 9, 1977; Capillary Liquid Fuel Nuclear Reactor, U.S. Patent 4,327,443, Apr. 27, 1982.

Cowans, Beatrice L. and Virginia E. Hall. Embroidered Fruit Bowl Wall Hanging and Kit, U.S. Patent 4,016,314, Apr. 5, 1977.

Cralle, Alfred L. Ice-Cream Mold and Disher, U.S. Patent 576,395, Feb. 2, 1897.

Creamer, Henry. Seven patents for steam trap devices, including Steam Feed Water Trap, U.S. Patent 313,854, Mar. 17, 1885; Steam Feed Water Traps, U.S. Patent 358,964, Mar. 8, 1887; Steam Trap and Feeder, U.S. Patent 394,463, Dec. 11, 1888.

Crossley, Frank Alphonso. Patents in metallurgical engineering include Titanium Base Alloy, U.S. Patent 2,798,807, July 9, 1957; Grain Refinement of Beryllium with Tungsten Carbide and Titanium Diboride, U.S. Patent 3,117,001, Jan. 7, 1964; Grain Refinement of Titanium Alloys, U.S. Patent 4,420,460, Dec. 13, 1983.

Crosthwait, David Nelson Jr. Thirty-nine patents, authority on heat transfer, ventilation and air conditioning; helped design Radio City Music Hall heating system. Titles include Apparatus for Returning Water to Boilers, U.S. Patent 1,353,457, Sept. 21, 1920; Method and Apparatus for Setting Thermostats, U.S. Patent 1,661,323, Mar. 6, 1928; Differential Vacuum Pump, U.S. Patent 1,755,430, Apr. 22, 1930.

Dacons, Joseph Carl. Numerous patents in organic chemistry, including Process for the Manufacture of Nitroform and Its Salts, U.S. Patent 3,125,606, Mar. 17, 1964; Dodecanitroquaterphenyl, U.S. Patent 3,450,778, June 17, 1969; Recrystallization of Hexanitrostilbene from Nitric Acid and Water, U.S. Patent 4,260,847, Apr. 7, 1981.

Davidson, Shelby J. Paper-Rewind Mechanism for Adding Machines, U.S. Patent 884,721, Apr. 14, 1908.

Davis, William R., Jr. Library Table, U.S. Patent 208,378, Sept. 24, 1878; Game Table, U.S. Patent 362,611, May 10, 1887.

Deitz, William A. Shoe [method of constructing boots], U.S. Patent 64,205, Apr. 30, 1867.

Dent, Anthony L. Rehydrated Silica Gel Dentifrice Abrasive, U.S. Patent 4,346,071, Aug. 24, 1982; Toothpaste Containing pH-Adjusted Zeolite, U.S. Patent 4,349,533, Sept. 14, 1982.

Dickinson, Joseph Hunter. Many patents for player piano machinery, including Adjustable Tracker for Pneumatic Playing Attachments, U.S. Patent 915,942, Mar. 23, 1909; Volume-Controlling Means for Mechanical Musical Instruments, U.S. Patent 926,178, June 29, 1909; Player-Piano, U.S. Patent 1,028,996, June 11, 1912.

Diuguid, Lincoln Isaiah. Burning Efficiency Enhancement Method; Alkynol Fuel Additive for Improved Automobile Mileage, U.S. Patent 4,539,015, Sept. 3, 1985.

Dorman, Linneaus Cuthbert. Prolific inventor with many chemical patents, including 3,5-Dihalo-4-Cyanoalkoxy Phenols, U.S. Patent 3,468,926, Sept. 23, 1969; Absorbents for Airborne Formaldehyde, U.S. Patent 4,517,111, May 14, 1985; Composites of Unsintered Calcium Phosphates and Synthetic Biodegradable Polymers Useful as Hard Tissue Prosthetics, U.S. Patent 4,842,604, June 27, 1989.

Dorticus, Clatonia J. Device for Applying Coloring Liquids to Sides of Soles or Heels of Shoes, U.S. Patent 535,820, Mar. 19, 1895; Machine for Embossing Photographs, U.S. Patent 537, 442, Apr. 16, 1895; Photographic Print Wash, U.S. Patent 537,968, Apr. 23, 1895.

Douglass, William. Several patents in harvesting equipment, including Self-Binding Harvester, U.S. Patent 789,010, May 2, 1905; Band-Twister, U.S. Patent 789,120, May 2, 1905; Carrier Chain, U.S. Patent 789,122, May 2, 1905.

Doyle, James. Automatic Serving System, U.S. Patent 1,019,137, Mar. 5, 1912.

Dugger, Cortland Otis. Inventor of "Duggerite" (barium magnesium aluminate). Patents include Method for Growing Single Oxide Crystals, U.S. Patent 3,595,803, July 27, 1971; Solid-State Laser Produced by a Chemical Reaction Between a Germanate and an Oxide Dopant, U.S. Patent 3,624,547, Nov. 30, 1971; Aluminum Nitride Single Crystal Growth from a Molten Mixture with Calcium Nitride, U.S. Patent 3,933,573, Jan. 20, 1976.

Dunnington, James H. Horse Detacher, U.S. Patent 578,979, Mar. 16, 1897.

Elder, Clarence L. Timing Device, U.S. Patent 3,165,188, Jan. 12, 1965; Non-Capsizable Container, U.S. Patent 3,367,525, Feb. 6, 1968; Bidirectional Monitoring and Control System, U.S. Patent 4,000,400, Dec. 28, 1976.

Elkins, Thomas. Dining and Ironing Table and Quilting Frame, U.S. Patent 100,020, Feb. 22, 1870; Chamber Commode, U.S. Patent 122,518, Jan. 9, 1872; Refrigerating Apparatus, U.S. Patent 221,222, Nov. 4, 1879.

Ferrell, Frank J. Eight patents for improvements in valves for steam engines, beginning with Valve, U.S. Patent 428,621, May 27, 1890.

Fisher, David A., Jr. Joiner's Clamp, U.S. Patent 162,281, Apr. 20, 1875; Furniture Caster, U.S. Patent 174,794, Mar. 14, 1876.

Flemmings, Robert F., Jr. Guitar, U.S. Patent 338,727, Mar. 3, 1886.

Frye, Clara. Surgical Appliance, U.S. Patent 847,758, Mar. 19, 1907.

Gant, Virgil Arnett. Method of Treating Hair, U.S. Patent 2,643,375, June 23, 1953; Hair Treating Composition and Method of Use for Setting, U.S. Patent 2,750,947, Sept. 4, 1956; Ammonium Polysiloxanolate Hair Treating Composition and Method for Using Same, U.S. Patent 2,787,272, Apr. 2, 1957.

Gaskin, Frances C. Sun Protectant Composition and Method, U.S. Patent 4,806,344, Feb. 21, 1989.

Gay, Eddie Charles. Cathode for a Secondary Electrochemical Cell, U.S. Patent 3,907,589, Sept. 23, 1975; Method of Preparing Electrodes with Porous Current Collector Structures and Solid Reactants for Secondary Electrochemical Cells, U.S. Patent 3,933,520, Jan. 20, 1976; Compartmented Electrode Structure, U.S. Patent 4,029,860, June 14, 1977.

Goode, Sarah E. Folding Cabinet Bed, U.S. Patent 322,177, July 14, 1885.

Gourdine, Meredith C. Over 23 U.S. patents for electrogasdynamic devices. These include such titles as Electrogasdynamic Systems and Methods, U.S. Patent 3,582,694, June 1, 1971; Electrogasdynamic Coating System, U.S. Patent 4,574,092, Mar. 4, 1986; Method for Airport Fog Precipitation, U.S. Patent 4,671,805, June 9, 1987.

Grant, George F. Golf-Tee, U.S. Patent 638,920, Dec. 12, 1899.

Green, Harry James, Jr. Method of Making a Striated Support for Filaments, U.S. Patent 3,548,045, Dec. 15, 1970; Substrate for Mounting Filaments in Close-Spaced Parallel Array, U.S. Patent 3,584,130, June 8, 1971; Method for Sealing Microelectronic Device Packages, U.S. Patent 3,648,357, Mar. 14, 1972.

Greene, Frank S., Jr. Use of Faulty Storage Circuits by Position Coding, U.S. Patent 3,654,610, Apr. 4, 1972.

Grenon, Henry. Razor Stropping Device, U.S. Patent 554,867, Feb. 18, 1896.

Griffin, Bessie V. Portable Receptacle Support, U.S. Patent 2,550,554, Apr. 24, 1951.

Hall, Lloyd Augustus. More than one hundred patents worldwide in food chemistry. Discovered curing salts for meat-packing. Patents include Synergistic Antioxidants and the Methods of Preparing Same, U.S. Patent 2,493,288, Jan. 3, 1950; Meat-curing Salt Composition, U.S. Patent 2,770,551, Nov. 13, 1956; Method of Preserving Fresh Frozen Pork Trimmings, U.S. Patent 2,845,358, July 29, 1958.

Hammond, Julia T. Apparatus for Holding Yarn Skeins, U.S. Patent 572,985, Dec. 15, 1896.

Harrison, Emmett Scott. Gas Turbine Air Compressor and Control Therefor, U.S. Patent 3,606,971, Sept. 21, 1971; Turbojet Afterburner Engine with Two-Position Exhaust Nozzle, U.S. Patent 4,242,865, Jan. 6, 1981.

Hawkins, Walter Lincoln. Numerous chemical patents, including Preparation of 1,2,Di-Primary Amines, U.S. Patent 2,587,043, Feb. 26, 1952; Stabilized Straight-Chain Hydrocarbons, U.S. Patent 2,889,306, June 2, 1959; Stabilized Alpha-Mono-Olefinic Polymers, U.S. Patent 3,304,283, Feb. 14, 1967.

Hearns, Robert. Sealing Attachment for Bottles, U.S. Patent 598,929, Feb. 15, 1898; Detachable Car Fender, U.S. Patent 628,003, July 4, 1899. [In Baker list as "Hearness"].

Henderson, Henry Fairfax, Jr. Weight Loss Control System, U.S. Patent 4,111,336, Sept. 5, 1978.

Hill, Henry Aaron. Patents include Manufacture of Azodicarbonamide, U.S. Patent 2,988,545, June 13, 1961; Foamable Composition Comprising a Thermoplastic Polymer and Barium Azocarbonate and Method of Foaming, U.S. Patent 3,141,002, July 14, 1964; Curing Furfuryl-Alcohol-Modified Urea Formaldehyde Condensates, U.S. Patent 3,297,611, Jan. 10, 1967.

Hilyer, Andrew F. Water Evaporator Attachment for Hot Air Registers, U.S. Patent 435,095, Aug. 26, 1890; Evaporator for Hot Air Registers, U.S. Patent 438,159, Oct. 14, 1890.

Hodge, John E. Numerous patents in the area of food technology, including Novel Reductones and Methods of Making Them, U.S. Patent 2,936,308, May 10, 1960; Glucose-Amine Sequestrants, U.S. Patent 2,996,449, Aug. 15, 1961; Substituted Benzodioxan Sweetening Compound, U.S. Patent 4,146,650, Mar. 27, 1979.

Holmes, Lydia M. Knockdown Wheeled Toy, U.S. Patent 2,529,692, Nov. 14, 1950.

Howard, Darnley Moseley. Method of Making Radome with an Integral Antenna, U.S. Patent 3,451,127, June 24, 1969.

Hunter, John W. Portable Weighing Scale, U.S. Patent 570,553, Nov. 3, 1896.

Hyde, Robert N. Composition for Cleaning and Preserving Carpets, U.S. Patent 392,205, Nov. 6, 1888.

Jackson, Benjamin F. Heating Apparatus, U.S. Patent 599,985, Mar. 1, 1898; Matrix Drying Apparatus, U.S. Patent 603,879, May 10, 1898; Gas Burner, U.S. Patent 622,482, Apr. 4, 1899.

Jackson, William H. Railway Switch, U.S. Patent 578,641, Mar. 9, 1897; Automatic Locking Switch, U.S. Patent 609,436, Aug. 23, 1898.

Johnson, Andrew R. Precision Digital Delay Circuit, U.S. Patent 3,376,436, Apr. 2, 1968.

Johnson, Daniel. Rotary Dining Table, U.S. Patent 396,089, Jan. 15, 1889; Lawn Mower Attachment, U.S. Patent 410,836, Sept. 10, 1889; Grass Receivers for Lawn Mowers, U.S. Patent 429,629, June 10, 1890.

Johnson, John ("Jack") Arthur. A little-known footnote to the career of the world's first black heavyweight champion, subject of Sackler's play, *The Great White Hope*; two patents applied for while he was a prisoner at Leavenworth: Wrench, U.S. Patent 1,413,121, Apr. 18, 1922, and Theft-Preventing Device for Vehicles, U.S. Patent 1,438,709, Dec. 12, 1922.

Johnson, Powell. Eye Protector, U.S. Patent 234,039, Nov. 2, 1880.

Johnson, Willie H. Mechanism for Overcoming Dead Centers, U.S. Patent 554,223, Feb. 4, 1896 and U.S. Patent 612,345, Oct. 11, 1898.

Johnson, Willis. Eggbeater, U.S. Patent 292,821, Feb. 5, 1884.

Jones, Frederick McKinley. Over 60 patents, including Ticket-dispensing Machine, U.S. Patent 2,163,754, June 27, 1939; Air Conditioning Unit, U.S. Patent 2,475,841, July 12, 1949; Starter Generator, U.S. Patent 2,475,842, July 12, 1949. McKinley's inventions made it possible to refrigerate trucks for long-distance travel.

Jones, Howard St. Claire, Jr. Many patents in the area of microwave and other types of antennas, including Electronically Scanned Microwave Antennas, U.S. Patent 3,268,901, Aug. 23, 1966; Dielectric-Loaded Antenna with Matching Window, U.S. Patent 3,518,683, June 30, 1970; Multifrequency Series-Fed Edge Slot Antenna, U.S. Patent 4,305,078, Dec. 8, 1981.

Jones, John Leslie. Numerous patents, including Preparation of Substituted Phenols, U.S. Patent 2,497,503, Feb. 14, 1950; Personnel Restraint System for Vehicular Occupants, U.S. Patent 3,690,695, Sept. 12, 1972; Smokeless Slow Burning Cast Propellant, U.S. Patent 4,112,849, Sept. 12, 1978.

Joyce, James A. Coal or Ore Bucket, U.S. Patent 603,143, Apr. 26, 1898.

Julian, Percy Lavon. Prolific researcher in organic chemistry and synthesizer of the drugs physostigmine and cortisone; holder of over 100 patents worldwide. Named to National Inventors Hall of Fame in 1990. Titles include Preparation of Cortisone, U.S. Patent 2,752,339, June 26, 1956; 16-Aminomethyl-17-Alkyltestosterone Derivatives, U.S. Patent 3,149,132, Sept. 15, 1964; Method for Preparing 16(Alpha)-Hydroxypregnenes and Intermediates Obtained Therein, U.S. Patent 3,274,178, Sept. 20, 1966.

Kenner, Mary Beatrice. Carrier Attachment for Invalid Walkers, U.S. Patent 3,957,071, May 18, 1976; Bathroom Tissue Holder, U.S. Patent 4,354,643, Oct. 19, 1982; Shower Wall and Bathtub Mounted Back Washer, U.S. Patent 4,696,068, Sept. 29, 1987.

Knox, Lawrence Howland. Production of Arecoline, U.S. Patent 2,506,458, May 2, 1950; Photochemical Preparation of Tropilidenes, U.S. Patent 2,647,081, July 28, 1953.

Knox, William J., Jr. At least 25 patents related to photography between 1950 and 1970, including Coating Aids for Gelatin Compositions, U.S. Patent 3,038,804, June 2, 1962; Gelatin Coating Compositions, U.S. Patent 3,306,749, Feb. 28, 1967; Coating Aids for Hydrophilic Colloid Layers of Photographic Elements, U.S. Patent 3,539,352, Nov. 10, 1970.

Latimer, Lewis Howard. One of the "Edison Pioneers" with patents in electricity, Latimer was creative in other fields as well. Patents include Manufacturing Carbons, U.S. Patent 252,386, Jan. 17, 1882; Apparatus for Cooling and Disinfecting, U.S. Patent 334,078, Jan. 12, 1886; Locking Racks for Hats, Coats, Umbrellas, etc., U.S. Patent 557,076, Mar. 24, 1896. See "Books" section for Latimer's publication on the Edison system.

Lavalette, William A. Printing Press, U.S. Patent 208,184, Sept. 17, 1878.

Lee, Joseph. Kneading Machine, U.S. Patent 524,042, Aug. 7, 1894; Bread Crumbing Machine, U.S. Patent 540,553, June 4, 1895.

LeVert, Francis Edward. Numerous patents in physics, including Threshold Self-Powered Gamma Detector for Use as a Monitor of Power in a Nuclear Reactor, U.S. Patent 4,091,288, May 23, 1978; Monitor for Deposition on Heat Transfer Surfaces, U.S. Patent 4,722,610, Feb. 2, 1988; Continuous Level Fluid Detector, U.S. Patent 4,805,454, Feb. 21, 1989.

Lewis, Edward R. Spring Gun, U.S. Patent 362,096, May 3, 1887.

Lewis, James Earl. Antenna Feed for Two Coordinate Tracking Radars, U.S. Patent 3,388,399, June 11, 1968.

Linden, Henry. Piano Truck, U.S. Patent 459,365, Sept. 8, 1891.

Loudin, Frederick J. Sash Fastener, U.S. Patent 510,432, Dec. 12, 1893; Key Fastener, U.S. Patent 512,308, Jan. 9, 1894.

Love, John L. Plasterer's Hawk, U.S. Patent 542,419, July 9, 1895; Pencil Sharpener, U.S. Patent 594,114, Nov. 23, 1897.

Lu Valle, James E. Photographic Processes, U.S. Patent 3,219,445, Nov. 23, 1965; Photographic Medium and Methods of Preparing Same, U.S. Patent 3,219,448, Nov. 23, 1965; Sensitizing Photographic Media, U.S. Patent 3,219,451, Nov. 23, 1965.

Madison, Shannon L. Refrigerating Apparatus, U.S. Patent 3,208,232, Sept. 28, 1965; Electrical Wiring Harness Termination System, U.S. Patent 4,793,820, Dec. 27, 1988.

Maloney, Kenneth Morgan. Alumina Coatings for an Electric Lamp, U.S. Patent 3,868,266, Feb. 25, 1975; Alumina Coatings for Mercury Vapor Lamps, U.S. Patent 4,079,288, Mar. 14, 1978.

Martin, Thomas J. Fire Extinguisher, U.S. Patent 125,063, Mar. 26, 1872. [In Baker list as "Marshall."]

Matzeliger, Jan Earnst. Credited with revolutionizing the American shoe industry with his shoe-lasting machine. Patents include Nailing Machine, U.S. Patent 421,954, Feb. 25, 1890; Tack Separating and Distributing Mechanism, U.S. Patent 423,937, Mar. 25, 1890; Lasting Machine, U.S. Patent 459,899, Sept. 22, 1891.

McCoy, Elijah. Twenty-eight patents for various inventions through 1900, and many thereafter, most in the field of automatic lubrication. The term for the genuine article, "The Real McCoy", is associated with his work. Titles include Lubricator for Steam Engines, U.S. Patent 129,843, July 23, 1872; Steam Cylinder Lubricator, U.S. Patent 173,032, Feb. 1, 1876; Lawn Sprinkler Design, U.S. Patent 631,549, Sept. 26, 1899.

McCree, Daniel. Portable Fire Escape, U.S. Patent 440,322, Nov. 11, 1890.

Miles, Alexander. Elevator, U.S. Patent 371,207, Oct. 11, 1887.

Millington, James E. Thermostable Dielectric Material, U.S. Patent 3,316,178, Apr. 25, 1967; Method of Making Expandable Styrene-Type Beads, U.S. Patent 4,286,069, Aug. 25, 1981; Method of Making Styrene-Type Polymer, U.S. Patent 4,730,027, Mar. 8, 1988.

Morgan, Garrett Augustus. Breathing Device, U.S. Patent 1,113,675, Mar. 24, 1914; Three-Way Traffic Signal, U.S. Patent 1,475,024, Nov. 20, 1923. Morgan used his gas mask in 1916 during the heroic rescue of workers trapped in a tunnel disaster.

Morris, Joel Morton. Switching System Charging Arrangement, U.S. Patent 3,688,047, Aug. 29, 1972.

Murray, George W. Congressman from South Carolina (see entry for *Congressional Record* in "Selected Periodical Articles"). Eight patents for agricultural implements in 1894, including Combined Furrow Opener and Stalk Knocker, U.S. Patent 517,960, Apr. 10, 1894; Reaper, U.S. Patent 520,892, June 5, 1894; Cotton Chopper, U.S. Patent 520,888, June 5, 1894.

Nash, Henry H. Life Preserving Stool, U.S. Patent 168,519, Oct. 5, 1875.

Neblett, Richard Flemon. Several chemical patents, including Gasoline Composition, U.S. Patent 2,955,928, Oct. 11, 1960; Motor Fuel Composition, U.S. Patent 3,054,666, Sept. 18, 1962; Oil-Soluble Ashless Dispersant-Detergent-Inhibitors, U.S. Patent 3,511,780, May 12, 1970.

Newman, Lyda D. Brush, U.S. Patent 614,335, Nov. 15, 1898.

Nickerson, William J. Piano Attachment, U.S. Patent 627,739, June 27, 1899.

Outlaw, John W. Horseshoe, U.S. Patent 614,273, Nov. 15, 1898.

Parker, Alice H. Heating Furnace, U.S. Patent 1,325,905, Dec. 23, 1919.

Parsons, James A., Jr. Numerous patents in metallurgy, including Iron Alloy, U.S. Patent 1,728,360, Sept. 17, 1929; Making Silicon Iron Compounds, U.S. Patent 1,819,479, Aug. 18, 1931; Corrosion-Resisting Ferrous Alloy, U.S. Patent 2,200,208, May 7, 1940.

Perryman, Frank R. Caterer's Tray Table, U.S. Patent 468,038, Feb. 2, 1892.

Peterson, Henry. Attachment for Lawn Mowers, U.S. Patent 402,189, Apr. 30, 1889.

Phelps, William H. Apparatus for Washing Vehicles, U.S. Patent 579,242, Mar. 23, 1897.

Pickering, John F. Air Ship, U.S. Patent 643,975, Feb. 20, 1900.

Pope, Jessie T. Croquignole Iron, U.S. Patent 2,409,791, Oct. 22, 1946. Patented with the aid of Eleanor Roosevelt, according to Autumn Stanley (see under "Books").

Porter, James Hall. Gas Well Sulfur Removal by Diffusion Through Polymeric Membranes, U.S. Patent 3,534,528, Oct. 20, 1970.

Prince, Frank Rodger. Production of 2-Pyrrolidones, U.S. Patent 3,637,743, Jan. 25, 1972.

Pugsley, Samuel. Gate Latch, U.S. Patent 357,787, Feb. 15, 1887.

Purvis, William B. Sixteen patents 1882-1897, ten for paper bag machines, as in U.S. Patent 293,353, Feb. 12, 1884; also Magnetic Car Balancing Device, U.S. Patent 539,542, May 21, 1895; Electric Railway System, U.S. Patent 588,176, Aug. 17, 1897.

Ransom, Victor Llewellyn. Traffic Data Processing System, U.S. Patent 3,231,866, Jan. 25, 1966; Method and Apparatus for Gathering Peak Load Traffic Data, U.S. Patent 3,866,185, Feb. 11, 1975.

Reynolds, Humphrey H. Window Ventilator for Railroad Cars, U.S. Patent 275,271, Apr. 3, 1883; Safety Gate for Bridges, U.S. Patent 437,937, Oct. 7, 1890.

Reynolds, Robert R. Non-Refillable Bottle, U.S. Patent 624,092, May 2, 1899.

Rhodes, Jerome B. Water Closet, U.S. Patent 639,290, Dec. 19, 1899.

Richardson, Albert C. Several patents, including Hame Fastener, U.S. Patent 255,022, Mar. 14, 1882; Casket Lowering Device, U.S. Patent 529,311, Nov. 13, 1894; Insect Destroyer, U.S. Patent 620,362, Feb. 28, 1899.

Richardson, William H. Cotton Chopper, U.S. Patent 343,140, June 1, 1886; Child's Carriage, U.S. Patent 405,599, June 18, 1889; also U.S. Patent 405,600, same title and date.

Richey, Charles V. Several patents in different areas of invention, including Fire Escape Bracket, U.S. Patent 596,427, Dec. 28, 1897; Combined Hammock and Stretcher, U.S. Patent 615,907, Dec. 13, 1898; Telephone Register and Lock-Out Device, U.S. Patent 1,063,599, June 3, 1913.

Rillieux, Norbert. Rillieux's inventions completely changed the sugar industry. Sugar Works, U.S. Patent 3,237, Aug. 26, 1843; Sugar Making, Improvement in, U.S. Patent 4,879, Dec. 10, 1846.

Roberts, Louis W. Gaseous Discharge Device, U.S. Patent 3,072,865, Jan. 8, 1963; GASAR (Device for Gas Amplification by Stimulated Emission and Radiation), U.S. Patent 3,257,620, June 21, 1966; Gallium-Wetted Movable Electrode Switch, U.S. Patent 3,377,576, Apr. 9, 1968.

Robinson, Elbert R. Electric Railway Trolley, U.S. Patent 505,370, Sept. 19, 1893; Casting Composite or Other Wheels, U.S. Patent 594,286, Nov. 23, 1897.

Rose, Raymond E. Control Apparatus [Aerodynamic], U.S. Patent 3,618,388, Nov. 9, 1971.

Russell, Edwin Roberts. Eleven patents on atomic energy processes, including The Separation of Plutonium from Uranium and Fission Products, U.S. Patent 2,855,269, Oct. 7, 1958; Ion Exchange Adsorption Process for Plutonium Separation, U.S. Patent 2,992,249, July 11, 1961; Thorium-Oxide or Thorium-Uranium Oxide with Magnesium Oxide, U.S. Patent 3,309,323, Mar. 14, 1967.

Ryder, Earl. High Silicon Cast Iron, U.S. Patent 3,129,095, Apr. 14,1964.

Sampson, George T. Sled Propeller, U.S. Patent 312,388, Feb. 17, 1885; Clothes Drier, U.S. Patent 476,416, June 7, 1892.

Sampson, Henry Thomas. Binder System for Propellants and Explosives, U.S. Patent 3,140,210, July 7, 1964; Case Bonding System for Cast Composite Propellants, U.S. Patent 3,212,265, Oct. 19, 1965; High Voltage Gamma Electric Cell, U.S. Patent 3,591,860, July 6, 1971.

Sams, Adolphus. Multiple Stage Rocket, U.S. Patent 3,199,455, Aug. 10, 1965; Emergency Release for

Extraction Chute, U.S. Patent 3,257,089, June 21, 1966; Rocket Motor Fuel Feed, U.S. Patent 3,310,938, Mar. 28, 1967.

Scottron, Samuel R. Several patents, including Adjustable Window Cornice, U.S. Patent 224,732, Feb. 17, 1880; Pole Tip, U.S. Patent 349,525, Sept. 21, 1886; Curtain Rod, U.S. Patent 481,720, Aug. 30, 1892. See Scottron's article on "Manufacturing Household Articles" in "Selected Periodical Articles" section of this bibliography.

Shaw, Earl D. Free-Electron Amplifier Device with Electromagnetic Radiation Delay Element, U.S. Patent 4,5299,942, July 16, 1985.

Silvera, Esteban. Ram-Valve Level Indicator, U.S. Patent 3,718,157, Feb. 27, 1973.

Smartt, Brinay. Reversing-Valve, U.S. Patent 799,498, Sept. 12, 1905; Valve Gear, U.S. Patent 935,169, Sept. 28, 1909; Wheel, U.S. Patent 1,052,290, Feb. 4, 1913.

Smith, Mildred E. Family Relationships Card Game, U.S. Patent 4,230,321, Oct. 28, 1980.

Smoot, Lanny S. Numerous patents in communications technology, including Optical Receiver Circuit with Active Equalizer, U.S. Patent 4,565,974, Jan. 21, 1986; Teleconference Facility with High Resolution Video Display [Bellcore's "Videowindow"], U.S. patent 4,890,314, Dec. 26, 1989; Teleconferencing Terminal with Camera Behind Display Screen, U.S. Patent 4,928,301, May 22, 1990.

Spikes, Richard B. Automatic Gear Shift, U.S. Patent 1,889,814, Dec. 6, 1932; Transmission and Shifting Means Therefor, U.S. Patent 1,936,996, Nov. 28, 1933; Automatic Safety Brake System, U.S. Patent 3,015,522, Jan 2, 1962.

Stanard, John. Oil Stove, U.S. Patent 413,689, Oct. 29, 1889; Refrigerator, U.S. Patent 455,891, July 14, 1891. [In Baker's list as "Standard."]

Stewart, Albert Clifton. Redox Couple Radiation Cell, U.S. Patent 3,255,044, June 7, 1966; Electric Cell, U.S. Patent 3,255,045, June 7, 1966.

Stewart, Marvin Charles. Arithmetic Unit for Digital Computers, U.S. Patent 3,395,271, July 30, 1968; System for Interconnecting Electrical Components, U.S. Patent 3,605,063, Sept. 14, 1971.

Stokes, Rufus. Exhaust Purifier, U.S. Patent 3,378,241, Apr. 16, 1968; Air Pollution Control Device, U.S. Patent 3,520,113, July 14, 1970.

Taylor, Moddie Daniel. Preparation of Anhydrous Alkaline Earth Halides, U.S. Patent 2,801,899, Aug. 6, 1957; Ion Exchange Adsorption Process for Plutonium Separation, U.S. Patent 2,992,249, July 11, 1961; Preparation of Anhydrous Lithium Salts, U.S. Patent 3,049,406, Aug. 14, 1962.

Turner, Madeline M. Fruit Press, U.S. Patent 1,180,959, Apr. 25, 1916.

Walker, M. Lucius, Jr. Laminar Fluid NOR Element, U.S. Patent 3,478,764, Nov. 18, 1969.

Weaver, Rufus J. Stairclimbing Wheelchair, U.S. Patent 3,411,598, Nov. 19, 1968.

West, James Edward. Over 100 patents worldwide in acoustical physics. Titles include Techniques for Fabrication of Foil Electret, U.S. Patent 3,945,112, Mar. 23, 1976; Technique for Removing Surface and Volume Charges from Thin High Polymer Films, U.S. Patent 4,248,808, Feb. 3, 1981; Noise Reducing Processing Arrangement for Microphone Arrays, U.S. Patent 4,802,227, Jan. 31, 1989.

Woods, Granville T. Known as the "Black Edison," with more than 60 patents, including Telephone Transmitter, U.S. Patent 308,817, Dec. 2, 1884; Electro-Motive Railway System, U.S. Patent 385,034, June 26, 1888; Amusement Apparatus, U.S. Patent 639,692, Dec. 19, 1899.

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